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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,913	04/13/2000	Brian Mitchell Bass	RAL9-00-0018	7379

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EXAMINER

SHAH, NILESH R

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/548,913

Applicant(s)

BASS ET AL.

Examiner

Nilesh R Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 1-4 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 13 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5. 6) ☐ Other: _____

Election/Restrictions

- I. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-3, drawn to process scheduling, classified in class 709, subclass 102.
 - II. Claim 4, drawn to a data transmission, classified in class 702, subclass 122.

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as data transmission flow. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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During a telephone conversation with Mr. Cockburn on April 17, 03 a provisional election was made with traverse to prosecute the invention of group 1, claims 1-3. Affirmation of this election must be made by applicant in replying to this Office action. Claim 4 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

2. Applicant is asked to update related cases described on pages 1- 3 of the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (5,465,335).

4. As per claim 2, Anderson teaches a method of placing data flows into a queue for service in turn comprising:

determining whether a data flow had a previous position in the queue (col. 4 lines 6-64 and col. 12 lines 7-45);

if the data flow had a previous position in the queue, determining whether the position which would be assigned to it is better than the previous position in the queue (col. 4 lines 6-64 and col. 12 lines 7-45).

if the new position which would be assigned is better than the previous position, using the previous position (col. 4 lines 6-64 and col. 12 lines 7-45);

and, if the previous position is not better than the position which would be assigned, using the position which would be assigned (col. 4 lines 6-64 and col. 12 lines 7-45). Anderson's TCB value is associated with the priority level and status of a task. It is equivalent that the priority level of the tasks that is located in the TCB and is sent to the CPU queue is considered data flow. Claim 2 is rejected.

Claim Rejections - 35 USC § 103

5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blelloch et al (5,768,594) (hereinafter Blelloch) further in view of Anderson (5,465,335) and in further view applicant's admitted prior art, pages 1-9.

6 As per claim 1, Blelloch teaches a system for periodically moving information units from a plurality of sources to an output destination based on information stored about each of the plurality of sources, the system comprising (fig. 1, col. 3 line 20-50, col. 6 lines 30-67):

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a time-based calendar which handles some of the information units based on the information stored about the plurality of sources (col. 6 lines 30-67);

a time-independent calendar which handles other of the information units based on information stored about the plurality of sources and which places each flow into a queue and which moves the flow to a different place in the queue after servicing the flow (col. 3 line 20-50, col. 6 lines 30-67). Blleloch does not specifically teach the use of how a queue flow works.

Anderson teaches a mechanism for determining when a flow is added to the time-based queue whether that flow has had a place in the time-based queue and preventing the flow from achieving a better place in the time-based queue as a result of disconnecting and reconnecting (col. 4 lines 6-64 and col. 12 lines 7-45). It would have been obvious to add the teachings of Anderson to Blleloch in order for tasks of higher priority to be placed higher in the queue than lower priority tasks. Anderson's TCB value is associated with the priority level and status of a task. As per page 7 of the applicant's specification, it states a weighted priority technique is implemented in the form of a round robin. It talks about how tasks of the highest priority are processed first and how a task of a lower priority may not exceed the priority level assigned. The switch between different queues is considered the disconnecting and reconnecting. One would want to include this system of preventing a change of priority level between different tasks to ensure fairness between different tasks and queues. Claim 1 is rejected.

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7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (5,465,335).

8. As per claim 3, Anderson teaches a method including considering the aging of the queue to determine whether the stored parameters remain valid (col. 4 lines 6-64 and col. 12 lines 7-45). The TCB value is latched onto the schedule register. It is obvious that the TCP must be within a valid parameter. For example if the value is unrecognizable by the computer it will not know where in the queue to place the task. Claim 3 is rejected.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh R Shah whose telephone number is 703-305-8105. The examiner can normally be reached on Monday-Friday 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 703-305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-0040 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

NS
May 1, 2003



**JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
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